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July 8, 2002

Reply to:

Vernal Office

State of Utah  
Division of Oil, Gas and Mining  
Attn: Wayne Hedberg  
P.O. Box 145801  
Salt Lake City Utah 84114-5801

RE: Amendement to Ziegler Chemical & Mineral Corporations  
Large Mine Plan M/047/013

Dear Mr. Hedberg:

We are forwarding to you an Amendment to Ziegler's Large Mine Plan. It is formatted following the guidelines of the "Revision of Large Mining Operations" form (MR-REV). Please process this amendment as expeditiously as possible. If there is any further information needed, do not hesitate to contact us. Thank you for your time.

Very truly yours,

McKEACHNIE, ALLRED,  
McCLELLAN & TROTTER, P.C.

By: Gayle F. McKeachnie

Enclosure  
cc: Stan Wagner

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JUL 10 2002

DIVISION OF  
OIL, GAS AND MINING

m/047/013

# **ZIEGLER CHEMICAL & MINERAL CORP.**

## **LITTLE BONANZA OPERATIONS**

**STAR ROUTE, VERNAL, UTAH 84078**

Telephone: (435) 789-3593 Fax: (435) 789-3593

April, May, June 2002

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**JUL 10 2002**

**DIVISION OF  
OIL, GAS AND MINING**

D. Wayne Hedberg-Permit Supervisor  
State of Utah, Division of Oil, Gas, and Mining  
1594 West North Temple, Suite, 1210  
Salt Lake City, Utah, 84114-5801

RE: Amendment to Ziegler Chemical & Mineral Corporations large Mine Plan

Dear Mr. Hedberg:

Ziegler Chemical would like to place a new mine site on the Independent vein to serve as an escape route for Ziegler personnel working in the Independent #2 mine. The Independent #2 mine is situated on land owned by Ziegler Chemical in Uintah County. The shaft for the escape mine will be approximately 580 feet East of the Independent #2 and 50 feet from the West of Zieglers property line. This escape shaft is in T9S, R24E, Sec. 16, SW1/4, NE1/4, NE1/4.

In addition to the shaft for the Independent #2 escape route, a second mineshaft will be located at this same site. A shaft will be sunk on a vein of Gilsonite located approximately 200 feet south of the Independent vein. This mine will be called the Sterling #1 and will be adjacent to the Independent #2 escape route.

### **R613- 004-105**

- A. Maps showing Boundaries, Streams, Access routes, and Previous impacts are included.
- B. Surface facilities maps showing proposed surface facilities and disturbances are included.

### **R613-004-106**

Ziegler Chemical plans on sinking two shafts in this area. One shaft will serve as an escape route for the personnel working in the Independent #2 mine. The other shaft will



be on a Gilsonite vein located approximately 200 feet south of the Independent vein. Zeigler Chemical and Mineral Corp. will call this mine the Sterling #1. The amount of area disturbed by the surface buildings and mine shafts of these two mines is estimated at 2.75 acres.

The shaft openings or collars in these two mines will be 24 feet long and 4 feet wide. The veins in this area are estimated at 950 feet deep. The width of the shaft will increase as the Gilsonite vein width increases.

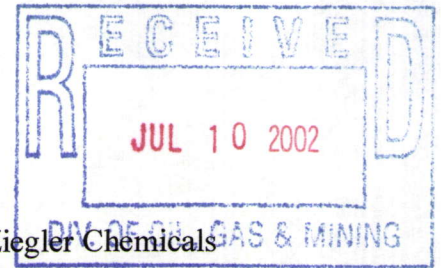
During the initial shaft sinking operations there will be some overburden removed to widen the shafts. The overburden will contain a small amount of irretrievable Gilsonite. This overburden will be stockpiled on the mine site for disposal back into the mines during reclamation. The amount of overburden stockpiled is not expected to exceed 200 ton during the life of the mines.

The work force in the Independent #2 and Sterling #1 will consist of two miners and a hoist operator per shift, one shift per day. The shaft will be sunk by loosening the ore with chipping hammers then removing the Gilsonite by vacuum (airlift system) to the ore storage bin on the surface. Some mining may be necessary to finish connecting this new shaft with the Independent #2 mine. There will now be a connection between the Sterling #1 and the Independent #2 mine. The Gilsonite will be removed from the mine in the same manner as shaft sinking. It will be loosed up with a chipping hammer then allowed to slide down a 45-degree slope atop the unmined ore to be airlifted (vacuumed) to the surface. Production from this mine may eventually reach 25 ton per shift with a storage capacity at the mine site of 30 ton. There should be about 1,500 ton of ore produced from the shaft alone.

Surface structures will consist of a tipple over the mineshaft, a hoist house and a compressor shed, which will serve as a tool shed. All Gilsonite will be hauled by truck to Zieglers Separator Plant for sizing. All roads are existing Uintah County or Ziegler maintained roadways.

A copy of a U.S.G.S. topographic map showing the topography of the area covered by this mine site is included. The soil at this mine site is a sandy clay to a depth of about 10 inches, below the surface soil is a layer of weathered rock which grades into solid sandstone.

The vegetative community of the area is Sage with some Greasewood intermingled.



All ground water that is encountered will be piped 2,600 feet West to Ziegler Chemicals water treatment plant.

**R613-004-107**

All openings in the ground (shafts and escapeways) will be fenced. All enclosures will have gates with locks to provide security. The gates will be locked when the mine is not in operation. Signs will be placed in order to warn the public of mining operations.

All garbage and solid wastes (other than waste rock) will be placed in covered 55-gallon cans then transported to a dumpster, located on Ziegler property. A commercial operator will then haul the dumpster to the county landfill.

**R613-004-108**

Any holes drilled for exploration and mining purposes will be plugged in conformance with the regulations outlined by the Division of Oil, Gas, and Mining.

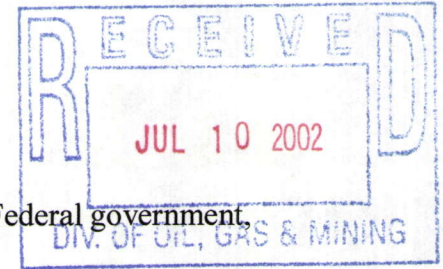
**R613-004-109**

The area of impact to surface and underground system will be approximately 400 feet by 300 feet. The total area of disturbance will equal approximately 2.75 acres. Where surface disturbance would be necessary, sagebrush and other vegetation will be removed with a road grader. Soil disturbed during initial set-up of the mining operation will be collected in piles in the immediate vicinity of the area from which they are removed. The topsoil pile will be seeded to stabilize it for future reclamation use.

Impacts to state and federal species and habitat will be minimal. Indigenous species of antelope should not be affected. Mining operations will have no impact on the black-footed ferret, which was recently introduced into an area in the Coyote Basin to the East. There are no streams or wetlands nearby and no established breeding areas for raptors are present.

Soil erosion is almost nonexistent as the roads are old established roads and the terrain is almost level. No sloping areas will be affected.





Whereas Zieglers operation is considered in "Indian Country" by the Federal government, air quality will be maintained per Federal E.P.A. regulations.

**R613-004-110**

Upon completion of mining operations, all machinery, equipment and debris will be removed from the mine site. All deleterious materials will be removed and placed in a dumpster located on Ziegler property. The dumpster will be removed by a commercial operator and taken to the County landfill.

The site will be graded to conform as closely as possible to pre-mining conditions, scarified, and seeded with a State approved seed mixture. All soils stockpiled will be returned to the mine site. The seedbed will be properly prepared to leave the surface rough for planting. An approved seed mixture will be applied at a rate recommended by the State.

**R613-004-111**

On cessation of mining operations, the mine site will be inspected to ensure that it is clean and in safe condition. All shafts will be permanently sealed to prevent unauthorized or accidental entry. All drill holed will be plugged with a surface cement plug. Holes that encounter fluids will be plugged in the subsurface to prevent aquifer contamination.

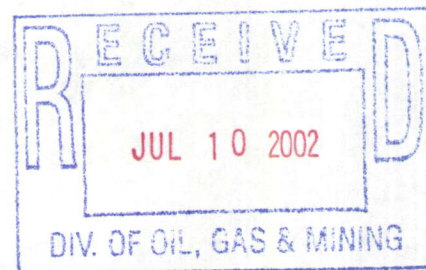
Deleterious material will be disposed of in a manner compatible with Federal and State regulations. All trash, scrap metal, wood and buildings will be removed from the site prior to soil reclamation.

The appropriate warning signs will be posted in locations of public access to operations.

A fence of barrier will be constructed to protect the mine site. The land will be reshaped to its original contour, and the topsoil and suitable overburden will be redistributed.

All roads will be reclaimed that are not part of a permanent transportation system. This process will include regrading, ripping the surface, topsoil replacement, and reseeding.

Topsoil will be properly redistributed after final grading. The disturbed area will be reseeded with an adaptable species. As per State recommendations





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JUL 10 2002

DIVISION OF  
OIL, GAS AND MINING**Ziegler Chemical Mineral Corp.**

Reclamation Estimate

ML- 20435 Uintah County, UT

Sterling #1

Unit costs in this estimate are from the Means Heavy Construction Cost Data 2002 book.

<u>Description</u>	<u># Units</u>	<u>Units</u>	<u>\$/Unit</u>	<u>Total</u>
F.E. Loader, T.M. /Operator	40	hrs	\$142.00	\$5,680.00
Crane-55 ton /Operator				\$1,515.80
Grader,30,000# /Operator	24	hrs	\$106.49	\$2,555.76
Crew Foreman	40	hrs	\$19.10	\$764.00
Welder	40	hrs	\$18.45	\$738.00
Concrete	13.5	CY	\$89.95	\$1,214.33
1 Carpenter Foreman	40	hrs	\$49.81	\$1,992.40
2 Carpenter Helpers	80	hrs	\$46.70	\$3,736.00
Forms, ect (SUM)	52	sum	\$7.82	\$406.64
Rebar (SUM)	22	sum	\$4.85	\$252.20
Backhoe-80 HP /Operator	24	hrs	\$76.79	\$1,842.96
Tractor +Drill +Operator	8	hrs	\$70.15	\$561.20
Seed Mix @ 12 lbs./acre	2.7	acre		\$374.47
Fertilizer @ 200 lbs./acre	2.7	acre		\$94.77
		<b>TOTAL</b>		<b>\$21,728.53</b>